

# ECONOCLENSE EFR

## INTRODUCTION

PMD Econoclense EFR is a low foaming electrolytic cleaner particularly recommended for final stage cleaning. The solution contains no silicates and is free rinsing thus eliminating drag over problems. Econoclense EFR is suitable for both rack and barrel operations and for ferrous and non-ferrous metals and also for heavy duty spray and power wash cleaning.

## BENEFITS

Low foaming

Non silicate

Easily rinsed

## SOLUTION MAKE-UP

PMD Econoclense EFR	25 to 75g/L	Optimum 60g/L
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## OPERATING DATA

Concentration	
Electrolytic	25-75g/L
Spray/power	10-25g/L
Temperature	50-85 deg C.
Treatment Time	30 seconds – 5 minutes
Current Density	2.5-10 A/dm <sup>2</sup>

## EQUIPMENT

Tanks	Mild or stainless steel or other materials suitable for use with alkaline solutions.
Heaters	PTFE, stainless steel or mild steel immersion heaters or steam coils.

## **INSTALLATION**

It is essential that the tanks to be used for Econoclense EFR are thoroughly cleaned and leached before any product is introduced.

If in any doubt as to the cleaning procedure please contact PMD (UK) Limited Technical Department.

1. Fill the tank  $\frac{3}{4}$  full with water.
2. Add the required amount of Econoclense EFR and stir to fully dissolve.
3. Top up to final level with water and heat to operating temperature.

## **MAINTENANCE AND CONTROL**

The solution should be analysed regularly and replenished as necessary. (See analysis method).

The volume of the solution should be maintained regularly by the addition of water. It is recommended that automatic level controllers are fitted to the tank to ensure constant solution concentration and protect heaters.

The solution should be discarded and a fresh one made-up when the solution is so loaded with absorbed soils that replenishment has no effect on cleaning time.

## **ANALYSIS METHOD**

### Reagents

1N sulphuric acid (Standard volumetric solution)  
Methyl orange indicator

### Method

1. Pipette a 25ml aliquot of the cooled working solution into a 250ml conical flask.
2. Add 50ml DI water and a few drops of methyl orange indicator.
3. Titrate to a pink end point with 1N sulphuric acid.
4. Record titre = t mls.

### Calculation

$t \times 1.98 = \text{g/L Econoclense EFR}$

### Replenishment

For every 1g/L low add 1g/L Econoclense EFR.

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## **DISPOSAL**

Dispose of in accordance with local authority requirements.

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## **PRODUCT FAMILIES**

The following products are referred to in this data sheet.

<u>Product Name</u>	<u>Product Number</u>
PMD Econoclense EFR	206010

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